

CHAPTER 6

ADAPTATION DATA

Section 6.1 Introduction

To inspect/change the RDA Adaptation Data ([Figure 6-9](#)), the operator selects the **Adaptation Data** button on the Main RDA HCI ([Figure 2-3](#)) and then chooses either the current adaptation data (`adaptcur.dat`) or the baseline adaptation data (`baseline.dat`). The **Adaptation Data** button is only available on the RDA HCI when the operator has successfully logged into the RDA.

Once the **Adaptation Data** window is open, the operator selects the desired **Adaptation Data** category by clicking the corresponding tab on the top of the **Adaptation Data** window.

The content of each tab/category is created dynamically when the **Adaptation Data** window opens, based upon items in **Adaptation Data** from the RDA. Each entry consists of an item description, the item id, the current value of the item in adaptation data, and (if applicable) the unit of measure for the value.

To view tool tips for the acceptable range of the values for any particular item, the operator hovers the mouse pointer over the value of that item.

If the **Adaptation Data** items in the category extend past the length of the **Adaptation Data** window, the scroll bars located on the right side of the window provide access to all items on the screen.

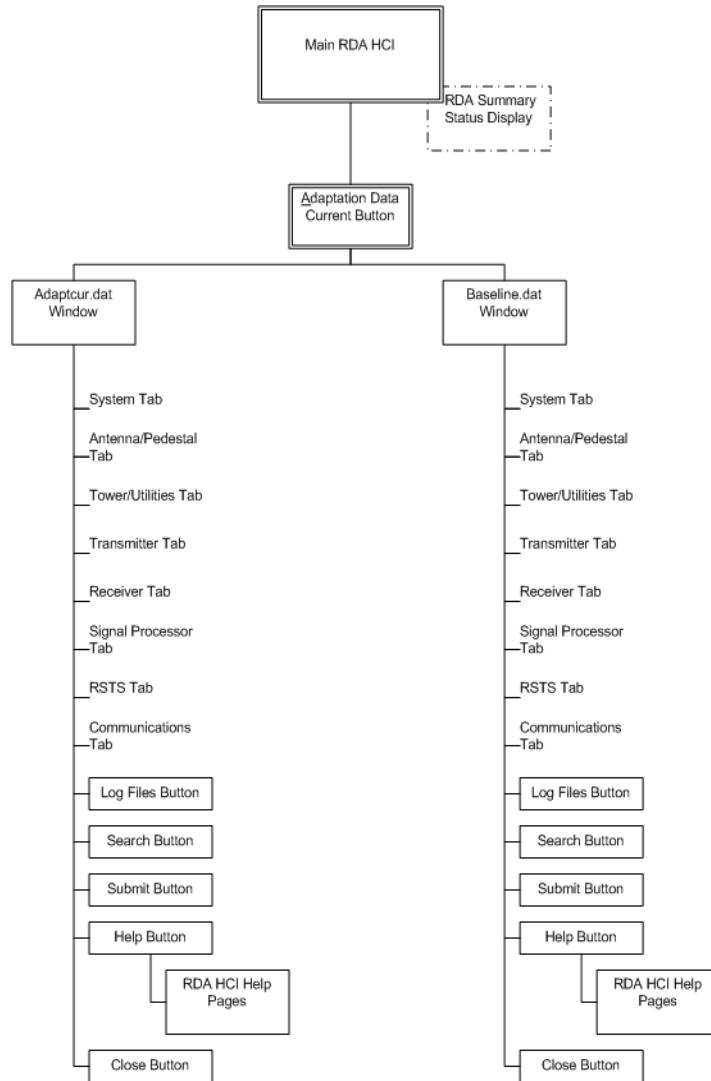


Figure 6-1. Adaptation Data Window Organization

6.1.1 SEARCH ADAPTATION DATA.

The Adaptation Data window allows operators to be able to search for certain items by Item ID's. The operator enters the desired Item ID into the **Search Item ID** textbox which is located at the bottom of the Adaptation Data window and clicks the **Search** button. If the Item ID could not be found, the Not Found dialog box (Figure 6-2) indicating that the Item ID was not found will be displayed.



Figure 6-2. Not Found Dialog Box

6.1.2 CHANGE ADAPTATION DATA.

The RDA Adaptation Data can only be edited by an operator on the localhost machine in the shelter, and the RDA must have control. Adaptation Data cannot be edited from an RDA HCI logged in from a remote location. An operator must be on the localhost machine in the shelter to edit current adaptation data. Baseline adaptation data is not an editable file.

The color of the value field for each item in the Adaptation Data is determined by whether the value is editable. If the background of the current value field is gray, the value is not editable. If the background of the value field is white, the value can be edited. Some items are not editable by default, can be edited in advanced mode, and will be displayed with a gray background until the **Advanced Edit** checkbox in the bottom right corner of the Adaptation Data window is selected. When the **Advanced Edit** checkbox is selected, some fields in the Adaptation Data are only ROC editable. These fields are not editable even if **Advanced Edit** is selected. See the edit level of each Adaptation Data field in the specific documentation for each tab/category in [Table 6-1](#) through [Table 6-8](#).

To edit the value of an editable Adaptation Data field, the operator positions the cursor in the text box containing the value of the field and types over the existing contents. Multiple fields may be edited before submitting the changes. To edit another field, the operator presses the **[Tab]** key or uses the mouse to position the cursor in the next field and continues editing. If an invalid value is submitted, the [Incorrect Input Dialog Box](#) ([Figure 6-3](#)) appears and notifies the operator of the valid value or range of values. The old value for the particular item will be restored.

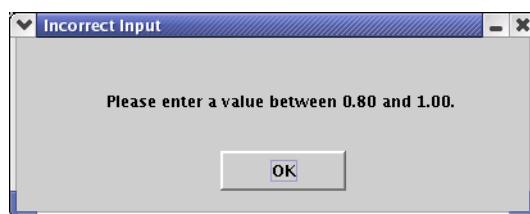


Figure 6-3. Incorrect Input Dialog Box

To submit changes to the Adaptation Data window, the operator selects the **Submit** button located at the bottom of the window. The Confirm Adapt Data Items Changed window

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(Figure 6-4) appears and displays all the changes that were made.

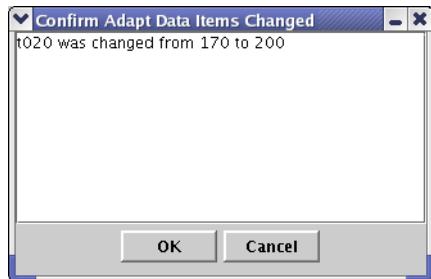


Figure 6-4. Confirm Adapt Data Items Changed

If the operator wishes not to submit the changes, the operator selects **Cancel** and returns back to the Adaptation Data window without submitting any changes to the RDA. To accept the changes, the operator selects **OK**. The Successfully Submitted Dialog Box (Figure 6-5) appears and informs the operator that the changes have been submitted and to restart the RDA in order for the changes to take effect

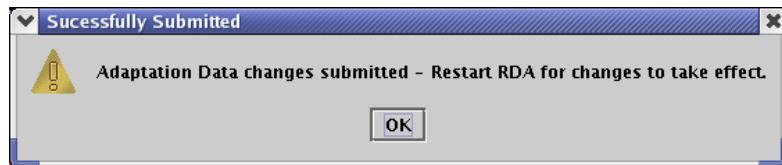


Figure 6-5. Successfully Submitted Dialog Box

6.1.3 VIEW PREVIOUS CHANGES TO ADAPTATION DATA.

Changes to the Adaptation Data are logged into the ADPLOG on the RDA local host. To view the log file with the changes to the Adaptation Data, the operator selects the **Log Files** button at the bottom of the Adaptation Data window. The Select a File to View window appears displaying all of the adaptation data log files available on the RDA localhost that the operator can view (Figure 6-6).

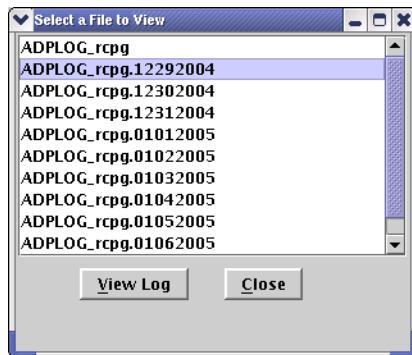


Figure 6-6. Adaptation Data Files to View

The operator selects a file to view and clicks on the **View Log** button. A new window appears to allow the operator to view the contents of the file (Figure 6-7). The log file show a history of adaptation data changes. If the operator does not want to view any of the listed log files, the operator clicks on the **Close** button.

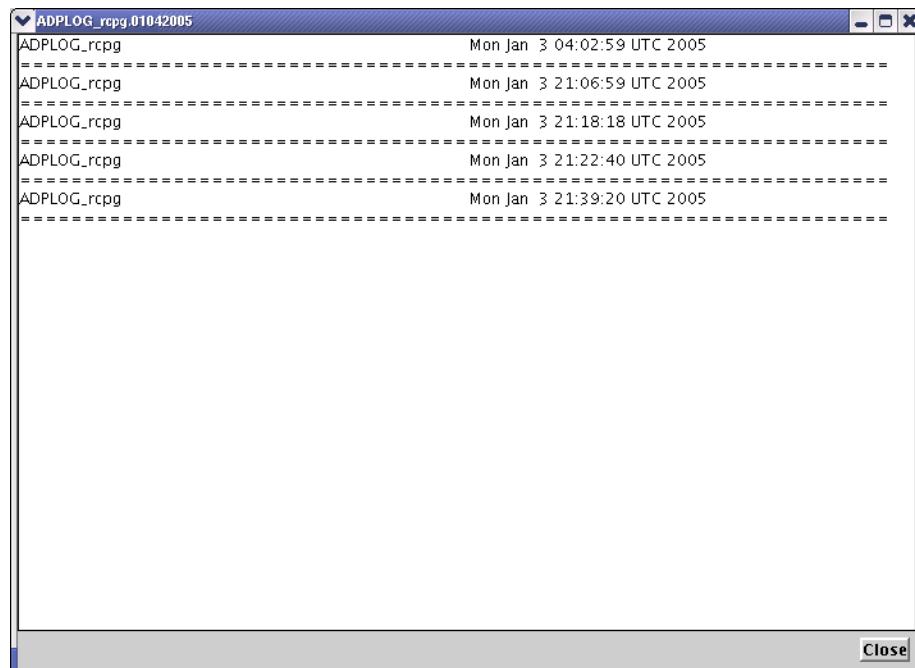


Figure 6-7. Contents of the Adaptation Data File Viewed

6.1.4 HELP FOR THE ADAPTATION DATA.

If the operator needs to access the help documentation for the Adaptation Data window, the operator presses the **Help** button located at the bottom right corner of the Adaptation Data window. This opens up the RDA HCI Help Pages.

6.1.5 CLOSING THE ADAPTATION DATA WINDOW.

To close the Adaptation Data window the operator presses the **Close** button located at the bottom right of the Adaptation Data window. If the operator is viewing the baseline Adaptation Data file, or there are no unsaved changes to the current Adaptation Data file, the Adaptation Data window closes. If the operator makes changes to the Adaptation Data and does not press the **Submit** button before they close the Adaptation Data window, the Close Adaptation Data dialog box ([Figure 6-8](#)) appears.



Figure 6-8. Close Adaptation Data Dialog Box

The operator is notified that changes have been made and were not saved and gives them the opportunity to save those changes now, by selecting **Yes**; dismiss them, not save and close the Adaptation Data window, by selecting **No**. Selecting **Yes** will cause the Adaptation Data window to act like the **Submit** button was selected. The Confirm Adapt Data Items Changed window will appear and display all the changes that were made. See [Figure 6-4](#). Upon completion of the saving of the data and getting the Successfully Submitted window and acknowledging it, the Adaptation Data window will close, because that was the commanded action. Selecting **Cancel** on the Confirm Adapt Data Items window will abort the save, and return the operator to the RDA HCI. Once the Adaptation Data window closes the operator is returned to the Main RDA HCI.

Section 6.2 System Tab

When the operator selects the System tab of the Adaptation Data window, the operator will be able to view the Adaptation Data for the system.

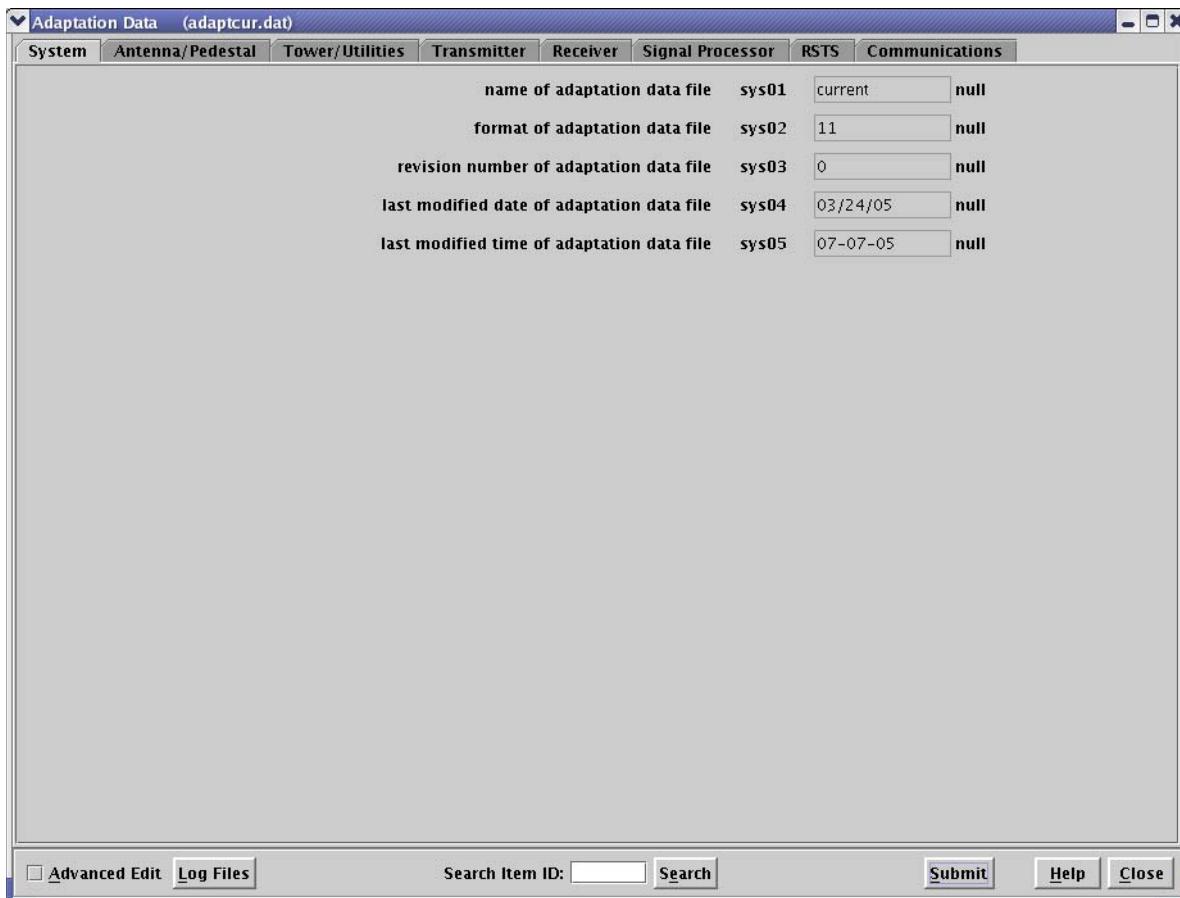


Figure 6-9. System Tab of the Adaptation Data Window

The table below lists the items on the System tab from top to bottom.

Table 6-1. System Tab Valid Values and Edit Levels

Field	ID Number	Valid Values	Units	Edit Level
name of adaptation data file	sys01	This will be a text value that will display the name of the Adaptation Data File	null	ROC editable

Table 6-1. System Tab Valid Values and Edit Levels

Field	ID Number	Valid Values	Units	Edit Level
format of adaptation data file	sys02	This will be an integer displaying an engineer code for format of the Adaptation Data File	null	ROC editable
revision number of adaptation data file	sys03	This will be a text value that will display the revision number of the Adaptation Data File	null	ROC editable
last modified date of adaptation data file	sys04	This will be a text value that will display the last modified date of the Adaptation Data File	null	ROC editable
last modified time of adaptation data file	sys05	This will be a text value that will display the last modified time of the Adaptation Data File	null	ROC editable

Section 6.3 Antenna/Pedestal

When the operator selects the Antenna/Pedestal tab of the Adaptation Data window, the operator will be able to view the Adaptation Data for the antenna and pedestal.

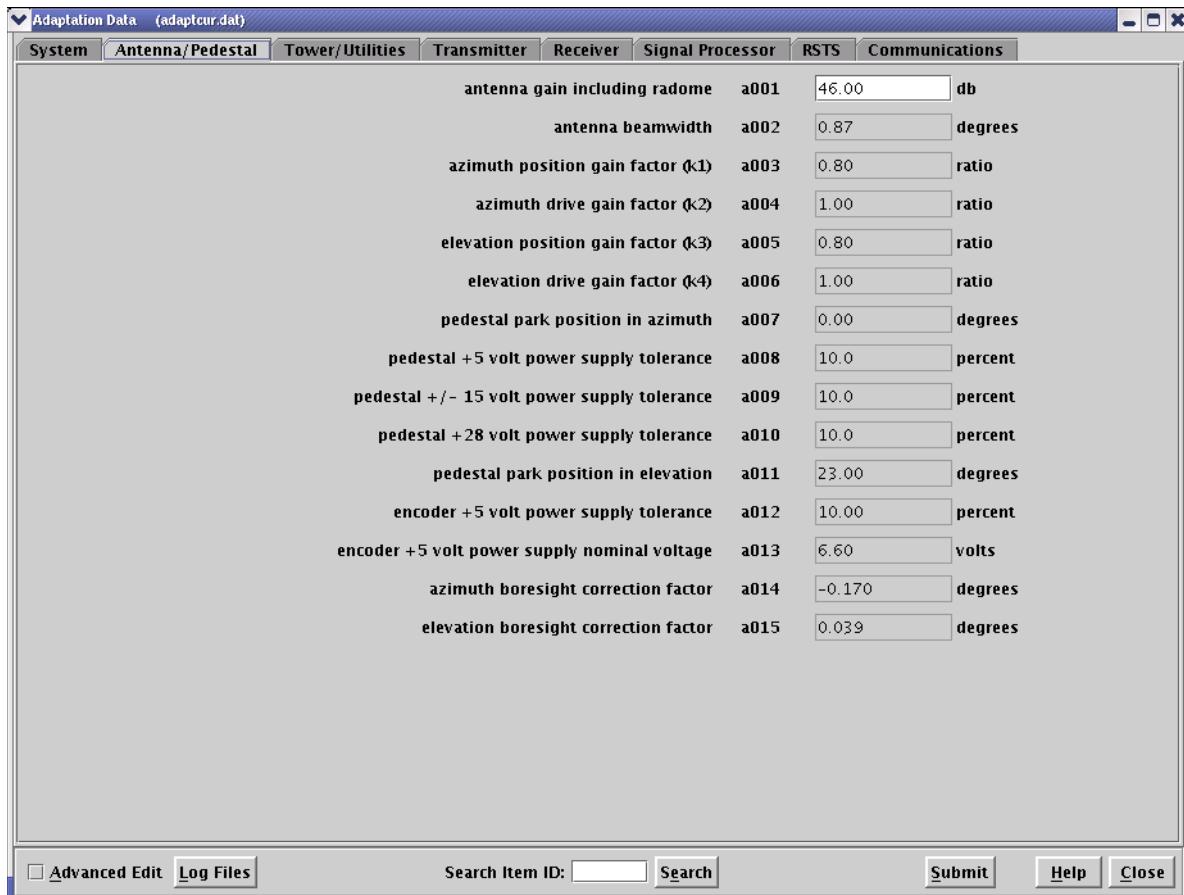


Figure 6-10. Antenna/Pedestal tab of the Adaptation Data Window

The table below lists the items on the Antenna/Pedestal tab from top to bottom.

Table 6-2. Antenna/Pedestal Tab Valid Values and Edit Levels

Field	ID Number	Valid Values	Units	Edit Level
antenna gain including radome	a001	43.0 to 47.0	db	default

Table 6-2. Antenna/Pedestal Tab Valid Values and Edit Levels

Field	ID Number	Valid Values	Units	Edit Level
antenna beamwidth	a002	0.80 to 1.00	degrees	advanced
azimuth position gain factor (k1)	a003	0.50 to 2.00	ratio	ROC editable
azimuth drive gain factor (k2)	a004	0.50 to 2.00	ratio	ROC editable
elevation position gain factor (k3)	a005	0.5.0 to 2.00	ratio	ROC editable
elevation drive gain factor (k4)	a006	0.50 to 2.00	ratio	ROC editable
pedestal park position in azimuth	a007	0.00 to 359.99	degrees	advanced
pedestal +5 volt power supply tolerance	a008	0.0 to 20.0	degrees	ROC editable
pedestal +/- 15 volt power supply tolerance	a009	0.0 to 20.0	percent	ROC editable
pedestal +28 volt power supply tolerance	a010	0.0 to 20.0	percent	ROC editable
pedestal park position in elevation	a011	-1.00 to 55.00	percent	advanced
encoder +5 volt power supply tolerance	a012	0.0 to 20.0	percent	ROC editable
encoder +5 volt power supply nominal voltage	a013	0.00 to 6.60	volts	advanced
azimuth boresight correction factor	a014	-1.000 to 1.000	degrees	advanced
elevation boresight correction factor	a015	-1.000 to 1.000	degrees	advanced

Section 6.4 Tower/Utilities

When the operator selects the Tower/Utilities tab of the Adaptation Data window, the operator will be able to view the Adaptation Data for the Tower/Utilities.

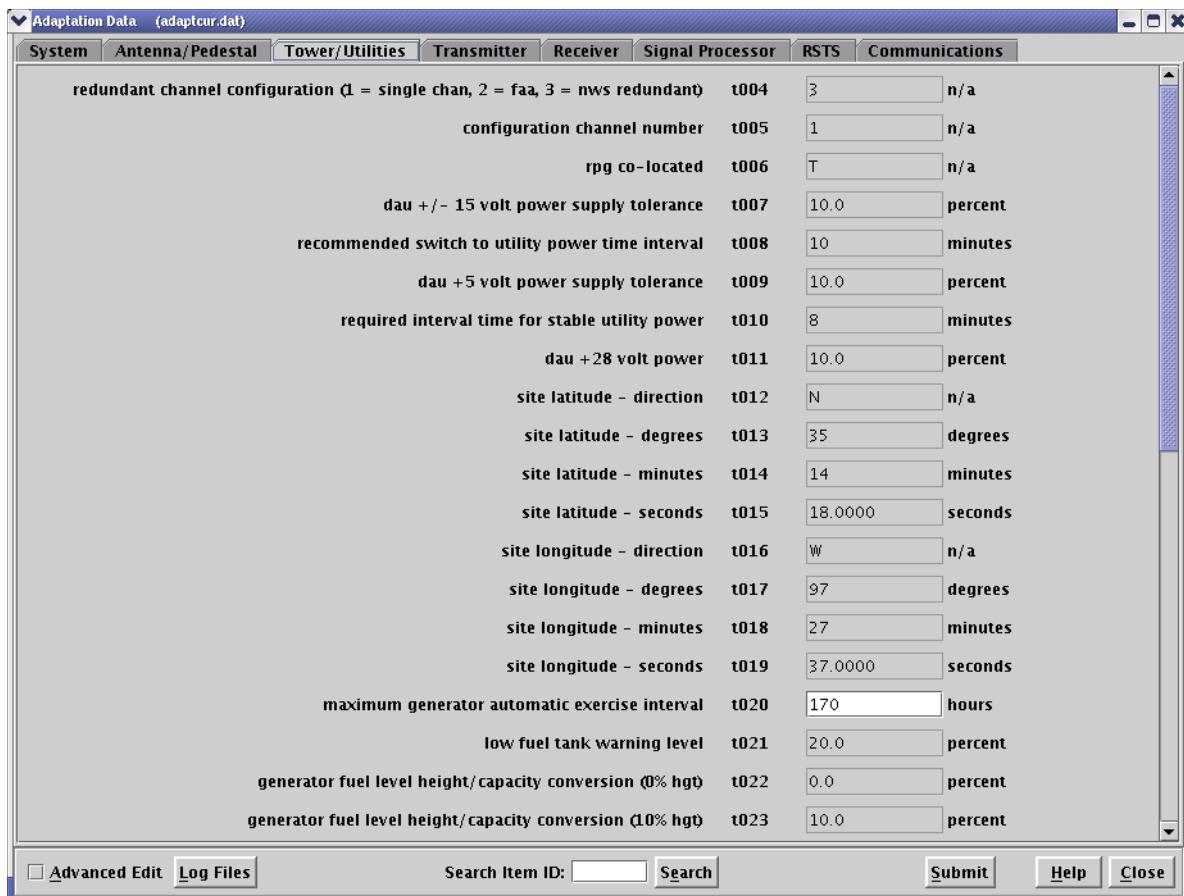


Figure 6-11. Tower/Utilities tab of the Adaptation Data Window

The table below lists the items on the Tower/Utilities tab from top to bottom.

Table 6-3. Tower/Utilities Category Valid Values and Edit Levels

Field	ID Number	Valid Values	Units	Edit Level
redundant channel configuration (1 = single channel, 2 = faa, 3 = nws redundant)	t004	1 to 3	n/a	advanced
configuration channel number	t005	1 to 2	n/a	advanced
rpg co-located	t006	T or F	n/a	advanced
dau +/- 15 volt power supply tolerance	t007	0.0 to 20.0	percent	ROC editable
recommended switch utility power time interval	t008	5 to 30	minutes	advanced
dau +5 volt power supply tolerance	t009	0.0 to 20.0	percent	ROC editable
required interval time for stable utility power	t010	1 to 20	minutes	advanced
dau +28 volt power	t011	0.0 to 20.0	percent	ROC editable
site latitude - direction	t012	N or S	n/a	advanced
site latitude - degrees	t013	0 to 89	degrees	advanced
site latitude - minutes	t014	0 to 59	minutes	advanced
site latitude - seconds	t015	0.0000 to 59.9999	seconds	advanced
site longitude - direction	t016	E or W	n/a	advanced
site longitude - degrees	t017	0 to 179	degrees	advanced
site longitude - minutes	t018	0 to 59	minutes	advanced
site longitude - seconds	t019	0.0000 to 59.9999	seconds	advanced
maximum generator automatic exercise interval	t020	5 to 500	hours	default
low fuel tank warning level	t021	0.0 to 100.0	percent	advanced

Table 6-3. Tower/Utilities Category Valid Values and Edit Levels

Field	ID Number	Valid Values	Units	Edit Level
generator fuel level height/capacity conversion (0 % hgt)	t022	0.0 to 100.0	percent	advanced
generator fuel level height/capacity conversion (10 % hgt)	t023	0.0 to 100.0	percent	advanced
generator fuel level height/capacity conversion (20 % hgt)	t024	0.0 to 100.0	percent	advanced
generator fuel level height/capacity conversion (30 % hgt)	t025	0.0 to 100.0	percent	advanced
generator fuel level height/capacity conversion (40 % hgt)	t026	0.0 to 100.0	percent	advanced
generator fuel level height/capacity conversion (50 % hgt)	t027	0.0 to 100.0	percent	advanced
generator fuel level height/capacity conversion (60 % hgt)	t028	0.0 to 100.0	percent	advanced
generator fuel level height/capacity conversion (70 % hgt)	t029	0.0 to 100.0	percent	advanced
generator fuel level height/capacity conversion (80 % hgt)	t030	0.0 to 100.0	percent	advanced
generator fuel level height/capacity conversion (90 % hgt)	t031	0.0 to 100.0	percent	advanced
generator fuel level height/capacity conversion (100 % hgt)	t032	0.0 to 100.0	percent	advanced
minimum generator shelter alarm temperature	t033	0.0 to 50.0	degrees celsius	ROC editable

Table 6-3. Tower/Utilities Category Valid Values and Edit Levels

Field	ID Number	Valid Values	Units	Edit Level
maximum generator shelter alarm temperature	t034	0.0 to 50.0	degrees celsius	ROC editable
minimum equipment shelter alarm temperature	t035	0.0 to 50.0	degrees celsius	ROC editable
maximum equipment shelter alarm temperature	t036	0.0 to 50.0	degrees celsius	ROC editable
minimum a/c discharge air temperature differential	t037	0.0 to 10.0	degrees celsius	ROC editable
maximum transmitter leaving air alarm temperature	t038	0.0 to 60.0	degrees celsius	ROC editable
maximum radome alarm temperature	t039	0.0 to 50.0	degrees celsius	ROC editable
minimum radome minus ambient temperature difference	t040	0.0 to 10.0	degrees celsius	ROC editable
transition power source installed	t041	T or F	n/a	advanced

Section 6.5 Transmitter

When the operator selects the Transmitter tab of the Adaptation Data window, the operator will be able to view the Adaptation Data for the transmitter.

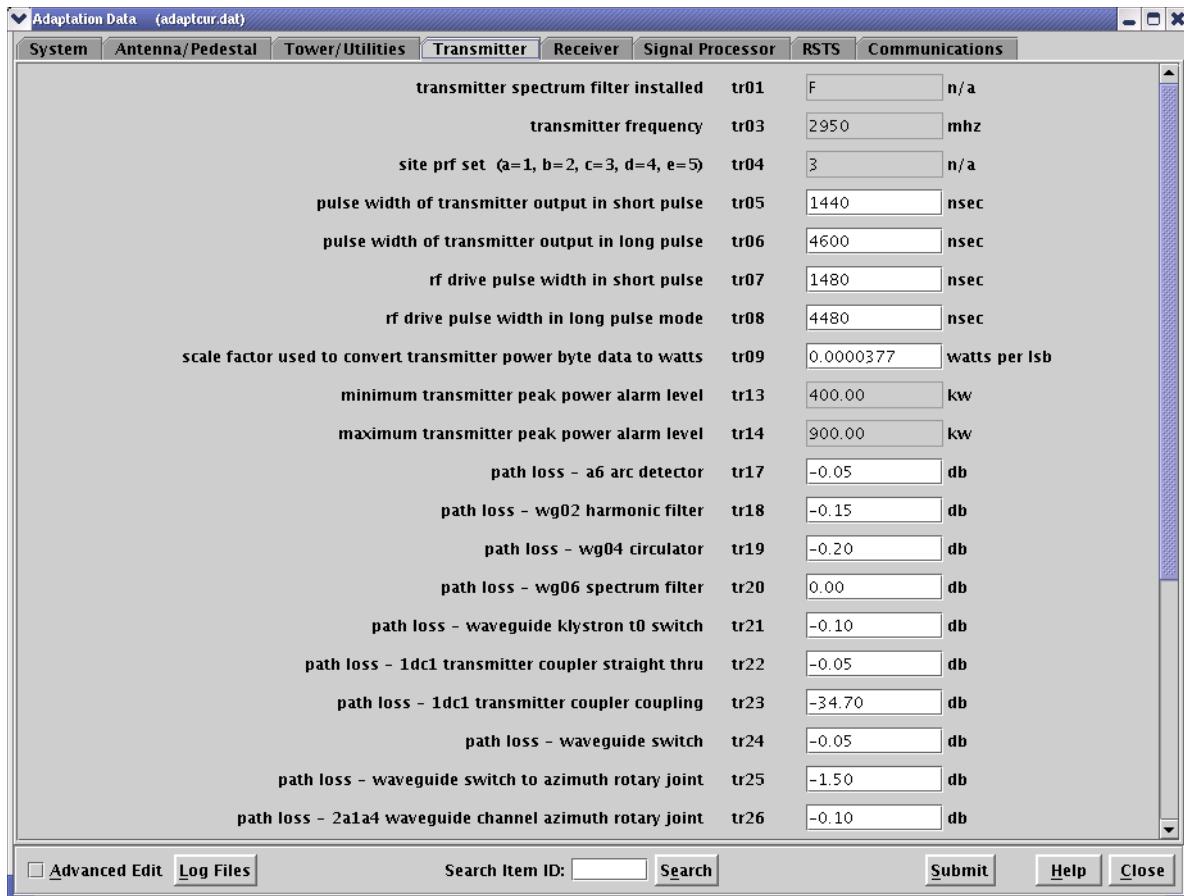


Figure 6-12. Transmitter Tab of the Adaptation Data Window

The table below lists the items on the Transmitter tab from top to bottom.

Table 6-4. Transmitter Category Valid Values and Edit Levels

Field	ID Number	Valid Values	Units	Edit Level
transmitter spectrum filter installed	tr01	t or f	n/a	advanced

Table 6-4. Transmitter Category Valid Values and Edit Levels

Field	ID Number	Valid Values	Units	Edit Level
transmitter frequency	tr03	2700 to 3000	mhz	advanced
site prf set (a=1, b=2, c=3, d=4, e=5)	tr04	1 to 5	n/a	advanced
pulse width of transmitter output in short pulse	tr05	1000 to 2000	nsec	default
pulse width of transmitter output in long pulse	tr06	3000 to 6000	nsec	default
rf drive pulse width in short pulse	tr07	500 to 2000	nsec	default
rf drive pulse width in long pulse mode	tr08	3000 to 6000	nsec	default
scale factor used to convert transmitter power byte data to watts	tr09	0.1e-4 to 0.15e-2	watts per lsb	default
minimum transmitter peak power alarm level	tr13	200.00 to 700.00	kw	ROC editable
maximum transmitter power alarm level	tr14	500.00 to 950.00	kw	ROC editable
path loss - a6 arc detector	tr17	-0.50 to -0.01	db	default
path loss - wg02 harmonic filter	tr18	-0.50 to -0.05	db	default
path loss - wg04 Circulator	tr19	-0.50 to -0.05	db	default
path loss - wg06 spectrum filter	tr20	-0.50 to 0.00	db	default
path loss - waveguide klystron t0 switch	tr21	-1.00 to -0.01	db	default
path loss - 1dc1 transmitter coupler straight thru	tr22	-0.10 to -0.01	db	default
path loss - 1dc1 transmitter coupler coupling	tr23	-40.0 to -20.00	db	default
path loss - waveguide switch	tr24	-1.00 to -0.05	db	default

Table 6-4. Transmitter Category Valid Values and Edit Levels

Field	ID Number	Valid Values	Units	Edit Level
path loss - waveguide switch to azimuth rotary joint	tr25	-1.80 to -0.05	db	default
path loss - 2a1a4 waveguide channel azimuth rotary joint	tr26	-0.50 to -0.05	db	default
path loss - waveguide azimuth joint to elevation joint	tr27	-0.50 to -0.05	db	default
path loss - a5 elevation rotary joint	tr28	-0.50 to -0.05	db	default
path loss - 2dc1 antenna coupler straight thru	tr29	-0.10 to -0.01	db	default
path loss - 2dc1 and coupler coupling	tr30	-55.00 to -40.00	db	default
path loss - waveguide coupler to antenna	tr31	-1.00 to -0.10	db	default
path loss - 1at4 transmitter coupler pad	tr32	-6.00 to 0.00	db	default
path loss - 2at1 antenna coupler pad	tr33	-9.00 to -2.50	db	default
path loss - t/r circulator - port 2 to port 3	tr34	-0.50 to 0.00	db	default

Section 6.6 Receiver

When the operator selects the Receiver tab of the Adaptation Data window, the operator will be able to view the Adaptation Data for the receiver.

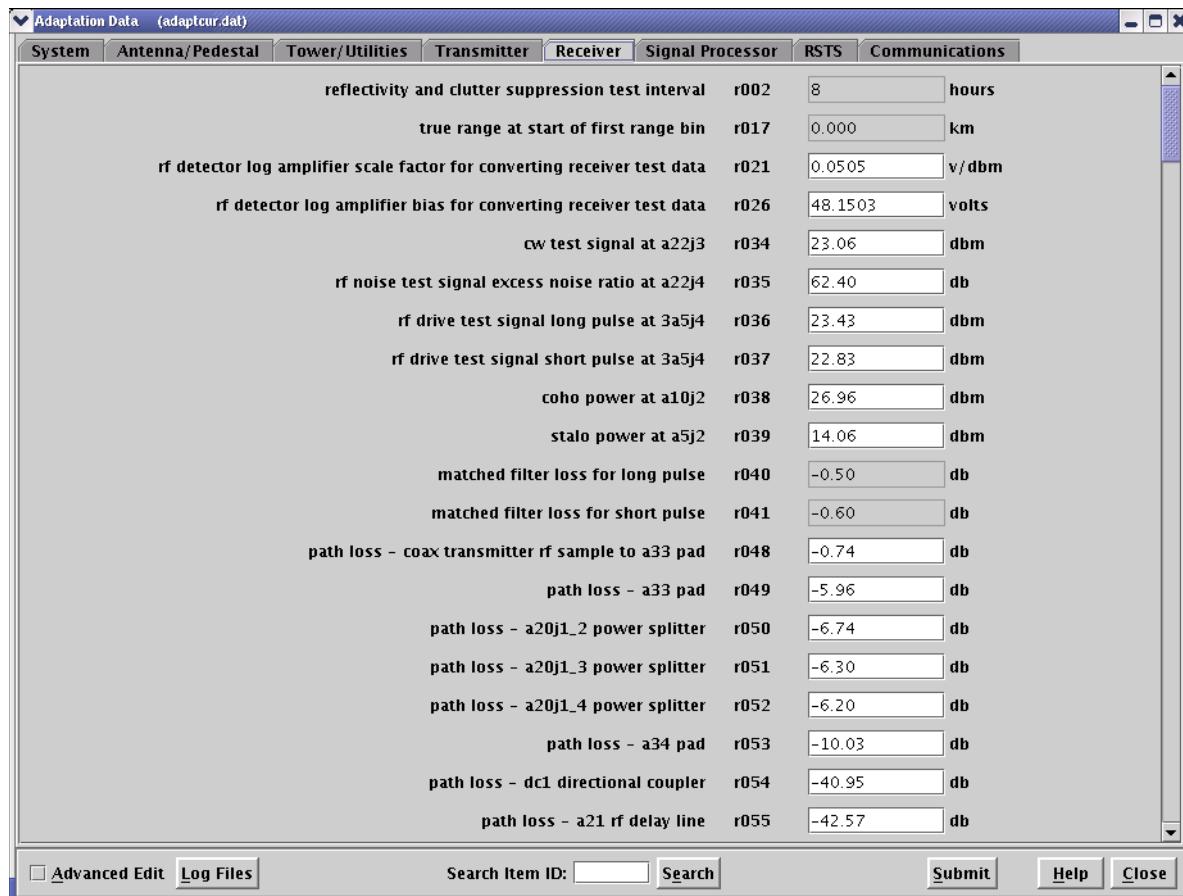


Figure 6-13. Receiver Tab of the Adaptation Data Window

The table below lists the items on the Receiver tab from top to bottom.

Table 6-5. Receiver Category Valid Values and Edit Levels

Field	ID Number	Valid Values	Units	Edit Level
reflectivity and clutter suppression test interval	r002	2 to 72	hours	advanced

Table 6-5. Receiver Category Valid Values and Edit Levels

Field	ID Number	Valid Values	Units	Edit Level
true range at start of first range bin	r017	0.000 to 3.000	km	ROC editable
rf detector log amplifier scale factor for converting receiver test data	r021	0.0010 to 0.1000	v/dbm	default
rf detector log amplifier bias for converting receiver test data	r026	0.0000 to 75.0000	volts	default
cw test signal at a22j3	r034	20.00 to 30.00	dbm	default
rf noise test signal excess noise ratio at a22j4	r035	45.00 to 80.00	db	default
rf drive test signal long pulse at 3a5j4	r036	19.00 to 28.00	dbm	default
rf drive test signal short pulse at 3a5j4	r037	19.00 to 28.00	dbm	default
coho power at a10j2	r038	23.00 to 29.00	dbm	default
stalo power at a5j2	r039	12.00 to 18.00	dbm	default
matched filter loss for long pulse	r040	-3.00 to 0.00	db	advanced
matched filter loss for short pulse	r041	-3.00 to 0.00	db	advanced
path loss – coax transmitter rf sample to a33 pad	r048	-3.00 to 0.40	db	default
path loss – a33 pad	r049	-10.00 to 0.00	db	default
path loss - a20j1_2 power splitter	r050	-8.00 to -4.00	db	default
path loss - a20j1_3 power splitter	r051	-8.00 to -4.00	db	default
path loss - a20j1_4 power splitter	r052	-8.00 to -4.00	db	default
path loss - a34 pad	r053	-20.00 to 0.00	db	default

Table 6-5. Receiver Category Valid Values and Edit Levels

Field	ID Number	Valid Values	Units	Edit Level
path loss – dc1 directional coupler	r054	-45.00 to -35.00	db	default
path loss – a21 rf delay line	r055	-60.00 to -40.00	db	default
path loss - coax transmitter rf drive to a22j2	r056	-5.00 to -0.50	db	default
path loss – a22j1_5 four position test switch	r057	9.00 to 15.00	db	default
path loss - a22j2_5 four position test switch	r058	-5.00 to -0.50	db	default
path loss - a22j3_5 four position test switch	r059	-5.00 to -0.50	db	default
path loss - a22j4_5 four position test switch	r060	-5.00 to -0.50	db	default
path loss - a22j2_6 four position test switch	r061	-35.00 to -25.00	db	default
path loss - a22j3_7 four position test switch	r062	-35.00 to -25.00	db	default
path loss - a23j1_2 test attenuator	r063	-8.00 to -3.00	db	default
path loss - a23j1_3 test attenuator	r064	-35.00 to -25.00	db	default
path loss - a23j1_4 test attenuator	r065	-35.00 to -20.00	db	default
path loss - a24j1_2 two position test switch	r066	-5.00 to -0.50	db	default
path loss - a24j1_3 two position test switch	r067	-5.00 to -0.50	db	default
path loss - a24j1_4 two position test switch	r068	-25.00 to -15.00	db	default
path loss - test coax to receiver protect coupler	r069	-5.20 to -0.20	db	default

Table 6-5. Receiver Category Valid Values and Edit Levels

Field	ID Number	Valid Values	Units	Edit Level
path loss - 2a3j3/2a7j3 receiver protector test coupler	r072	-24.00 to -16.00	db	default
path loss - 2a3j1_2/2a7j1_2 receiver protector	r073	-3.00 to -0.10	db	default
path loss - 2a4j1_2/2a8j1_2 low noise amplifier	r074	24.00 to 32.00	db	default
path loss – low noise amplifier to a36 pad	r077	-5.00 to -0.50	db	default
path loss - a36 pad	r078	-6.00 to 0.00	db	default
path loss - w103 coax a24j3 to dc2	r079	-2.00 to 0.00	db	default
path loss – dc2 directional coupler	r080	-25.00 to -15.00	db	default
path loss - a4 preselect bandpass filter	r081	-3.50 to -0.50	db	default
path loss – w102 receive coax a4 to a5	r082	-0.50 to 0.00	db	default
path loss – a5j1_3 mixer preamplifier	r083	15.00 to 25.00	db	default
path loss – a5j1_4 mixer preamplifier	r084	0.00 to 10.00	db	default
path loss – a5j1_5 mixer preamplifier	r085	-25.00 to -15.00	db	default
path loss a5j1_7 mixer preamplifier	r086	-13.00 to -2.00	db	default
path loss – a5j2_6 mixer preamplifier	r087	-35.00 to -25.00	db	default
path loss – a27 multi position rf select switch	r107	-1.00 to 0.00	db	default
test signal attenuator insertion losses (0db)	r114	-1.00 to 1.00	db	default

Table 6-5. Receiver Category Valid Values and Edit Levels

Field	ID Number	Valid Values	Units	Edit Level
test signal attenuator insertion losses (1db)	r115	-2.00 to 0.00	db	default
test signal attenuator insertion losses (2db)	r116	-3.00 to -1.00	db	default
test signal attenuator insertion losses (3db)	r117	-4.00 to -2.00	db	default
test signal attenuator insertion losses (4db)	r118	-5.00 to -3.00	db	default
test signal attenuator insertion losses (5db)	r119	-6.00 to -4.00	db	default
test signal attenuator insertion losses (6db)	r120	-7.00 to -5.00	db	default
test signal attenuator insertion losses (7db)	r121	-8.00 to -6.00	db	default
test signal attenuator insertion losses (8db)	r122	-9.00 to -7.00	db	default
test signal attenuator insertion losses (9db)	r123	-10.00 to -8.00	db	default
test signal attenuator insertion losses (10db)	r124	-11.00 to -9.00	db	default
test signal attenuator insertion losses (11db)	r125	-12.00 to -10.00	db	default
test signal attenuator insertion losses (12db)	r126	-13.00 to -11.00	db	default
test signal attenuator insertion losses (13db)	r127	-14.00 to -12.00	db	default
test signal attenuator insertion losses (14db)	r128	-15.00 to -13.00	db	default
test signal attenuator insertion losses (15db)	r129	-16.00 to -14.00	db	default
test signal attenuator insertion losses (16db)	r130	-17.00 to -15.00	db	default

Table 6-5. Receiver Category Valid Values and Edit Levels

Field	ID Number	Valid Values	Units	Edit Level
test signal attenuator insertion losses (17db)	r131	-18.00 to -16.00	db	default
test signal attenuator insertion losses (18db)	r132	-19.00 to -17.00	db	default
test signal attenuator insertion losses (19db)	r133	-20.00 to -18.00	db	default
test signal attenuator insertion losses (20db)	r134	-21.00 to -19.00	db	default
test signal attenuator insertion losses (21db)	r135	-22.00 to -20.00	db	default
test signal attenuator insertion losses (22db)	r136	-23.00 to -21.00	db	default
test signal attenuator insertion losses (23db)	r137	-24.00 to -22.00	db	default
test signal attenuator insertion losses (24db)	r138	-25.00 to -23.00	db	default
test signal attenuator insertion losses (25db)	r139	-26.00 to -24.00	db	default
test signal attenuator insertion losses (26db)	r140	-27.00 to -25.00	db	default
test signal attenuator insertion losses (27db)	r141	-28.00 to -26.00	db	default
test signal attenuator insertion losses (28db)	r142	-29.00 to -27.00	db	default
test signal attenuator insertion losses (29db)	r143	-30.00 to -28.00	db	default
test signal attenuator insertion losses (30db)	r144	-31.00 to -29.00	db	default
test signal attenuator insertion losses (31db)	r145	-32.00 to -30.00	db	default
test signal attenuator insertion losses (32db)	r146	-33.00 to -31.00	db	default

Table 6-5. Receiver Category Valid Values and Edit Levels

Field	ID Number	Valid Values	Units	Edit Level
test signal attenuator insertion losses (33db)	r147	-34.00 to -32.00	db	default
test signal attenuator insertion losses (34db)	r148	-35.00 to -33.00	db	default
test signal attenuator insertion losses (35db)	r149	-36.00 to -34.00	db	default
test signal attenuator insertion losses (36db)	r150	-37.00 to -35.00	db	default
test signal attenuator insertion losses (37db)	r151	-38.00 to -36.00	db	default
test signal attenuator insertion losses (38db)	r152	-39.00 to -37.00	db	default
test signal attenuator insertion losses (39db)	r153	-40.00 to -38.00	db	default
test signal attenuator insertion losses (40db)	r154	-41.00 to -39.00	db	default
test signal attenuator insertion losses (41db)	r155	-42.00 to -40.00	db	default
test signal attenuator insertion losses (42db)	r156	-43.00 to -41.00	db	default
test signal attenuator insertion losses (43db)	r157	-44.00 to -42.00	db	default
test signal attenuator insertion losses (44db)	r158	-45.00 to -43.00	db	default
test signal attenuator insertion losses (45db)	r159	-46.00 to -44.00	db	default
test signal attenuator insertion losses (46db)	r160	-47.00 to -45.00	db	default
test signal attenuator insertion losses (47db)	r161	-48.00 to -46.00	db	default
test signal attenuator insertion losses (48db)	r162	-49.00 to -47.00	db	default

Table 6-5. Receiver Category Valid Values and Edit Levels

Field	ID Number	Valid Values	Units	Edit Level
test signal attenuator insertion losses (49db)	r163	-50.00 to -48.00	db	default
test signal attenuator insertion losses (50db)	r164	-51.00 to -49.00	db	default
test signal attenuator insertion losses (51db)	r165	-52.00 to -50.00	db	default
test signal attenuator insertion losses (52db)	r166	-53.00 to -51.00	db	default
test signal attenuator insertion losses (53db)	r167	-54.00 to -52.00	db	default
test signal attenuator insertion losses (54db)	r168	-55.00 to -53.00	db	default
test signal attenuator insertion losses (55db)	r169	-56.00 to -54.00	db	default
test signal attenuator insertion losses (56db)	r170	-57.00 to -55.00	db	default
test signal attenuator insertion losses (57db)	r171	-58.00 to -56.00	db	default
test signal attenuator insertion losses (58db)	r172	-59.00 to -57.00	db	default
test signal attenuator insertion losses (59db)	r173	-60.00 to -58.00	db	default
test signal attenuator insertion losses (60db)	r174	-61.00 to -59.00	db	default
test signal attenuator insertion losses (61db)	r175	-62.00 to -60.00	db	default
test signal attenuator insertion losses (62db)	r176	-63.00 to -61.00	db	default
test signal attenuator insertion losses (63db)	r177	-64.00 to -62.00	db	default
test signal attenuator insertion losses (64db)	r178	-65.00 to -63.00	db	default

Table 6-5. Receiver Category Valid Values and Edit Levels

Field	ID Number	Valid Values	Units	Edit Level
test signal attenuator insertion losses (65db)	r179	-66.00 to -64.00	db	default
test signal attenuator insertion losses (66db)	r180	-67.00 to -65.00	db	default
test signal attenuator insertion losses (67db)	r181	-68.00 to -66.00	db	default
test signal attenuator insertion losses (68db)	r182	-69.00 to -67.00	db	default
test signal attenuator insertion losses (69db)	r183	-70.00 to -68.00	db	default
test signal attenuator insertion losses (70db)	r184	-71.00 to -69.00	db	default
test signal attenuator insertion losses (71db)	r185	-72.00 to -70.00	db	default
test signal attenuator insertion losses (72db)	r186	-73.00 to -71.00	db	default
test signal attenuator insertion losses (73db)	r187	-74.00 to -72.00	db	default
test signal attenuator insertion losses (74db)	r188	-75.00 to -73.00	db	default
test signal attenuator insertion losses (75db)	r189	-76.00 to -74.00	db	default
test signal attenuator insertion losses (76db)	r190	-77.00 to -75.00	db	default
test signal attenuator insertion losses (77db)	r191	-78.00 to -76.00	db	default
test signal attenuator insertion losses (78db)	r192	-79.00 to -77.00	db	default
test signal attenuator insertion losses (79db)	r193	-80.00 to -78.00	db	default
test signal attenuator insertion losses (80db)	r194	-81.00 to -79.00	db	default

Table 6-5. Receiver Category Valid Values and Edit Levels

Field	ID Number	Valid Values	Units	Edit Level
test signal attenuator insertion losses (81db)	r195	-82.00 to -80.00	db	default
test signal attenuator insertion losses (82db)	r196	-83.00 to -81.00	db	default
test signal attenuator insertion losses (83db)	r197	-84.00 to -82.00	db	default
test signal attenuator insertion losses (84db)	r198	-85.00 to -83.00	db	default
test signal attenuator insertion losses (85db)	r199	-86.00 to -84.00	db	default
test signal attenuator insertion losses (86db)	r200	-87.00 to -85.00	db	default
test signal attenuator insertion losses (87db)	r201	-88.00 to -86.00	db	default
test signal attenuator insertion losses (88db)	r202	-89.00 to -87.00	db	default
test signal attenuator insertion losses (89db)	r203	-90.00 to -88.00	db	default
test signal attenuator insertion losses (90db)	r204	-91.00 to -89.00	db	default
test signal attenuator insertion losses (91db)	r205	-92.00 to -90.00	db	default
test signal attenuator insertion losses (92db)	r206	-93.00 to -91.00	db	default
test signal attenuator insertion losses (93db)	r207	-94.00 to -92.00	db	default
test signal attenuator insertion losses (94db)	r208	-95.00 to -93.00	db	default
test signal attenuator insertion losses (95db)	r209	-96.00 to -94.00	db	default
test signal attenuator insertion losses (96db)	r210	-97.00 to -95.00	db	default

Table 6-5. Receiver Category Valid Values and Edit Levels

Field	ID Number	Valid Values	Units	Edit Level
test signal attenuator insertion losses (97db)	r211	-98.00 to -96.00	db	default
test signal attenuator insertion losses (98db)	r212	-99.00 to -97.00	db	default
test signal attenuator insertion losses (99db)	r213	-100.00 to -98.00	db	default
test signal attenuator insertion losses (100db)	r214	-101.00 to -99.00	db	default
test signal attenuator insertion losses (101db)	r215	-102.00 to -100.00	db	default
test signal attenuator insertion losses (102db)	r216	-103.00 to -101.00	db	default
test signal attenuator insertion losses (103db)	r217	-104.00 to -102.00	db	default
receiver noise calibration smoothing coefficient	r219	0.05 to 1.00	ratio	advanced
system noise temperature degrade limit for controlling channel	r227	450.0 to 1200.0	degrees kelvin	ROC editable
system noise temperature maintenance limit for controlling channel	r228	400.0 to 1200.0	degrees kelvin	ROC editable
target system calibration for short pulse	r234	-38.0 to -58.0	db	default
target system calibration for long pulse	r236	-45.00 to -65.00	db	default
linear channel rf drive test target degrade limit	r237	1.0 to 10.0	db	ROC editable
limit for difference between computed and target linear channel syscal	r238	1.0 to 10.0	db	advanced

Table 6-5. Receiver Category Valid Values and Edit Levels

Field	ID Number	Valid Values	Units	Edit Level
linear channel klystron output target consistency degrade limit	r239	1.0 to 10.0	db	ROC editable
path loss - 2f11/2f12 emi filter	r247	-0.60 to 0.00	db	default
path loss - w900/w901 coax to emi filter	r248	-0.50 to 0.00	db	default
path loss - at4 3db attenuator	r249	-6.00 to 0.00	db	default
path loss - ifd if anti-alias filter	r250	-4.00 to 0.00	db	default
path loss - a20j1_5 power splitter	r251	-8.00 to -4.00	db	default
path loss - at5 50db attenuator	r252	-53.00 to -47.00	db	default
path loss - at7 burst pulse optional attenuator	r253	-8.00 to 0.00	db	default
path loss - a39 rf_if burst mixer	r254	-15.00 to -8.00	db	default
path loss - ar1 burst if amplifier	r255	23.00 to 33.00	db	default
path loss - ifd burst anti-alias filter	r256	-4.00 to 0.00	db	default
path loss - dc3 j1_3 6db coupler, through	r257	-3.00 to 0.00	db	default
path loss - dc3 j1_3 6db coupler, coupled	r258	-10.00 to -5.00	db	default
path loss - at2+at3 26db coho attenuator	r259	-29.00 to -23.00	db	default
receiver noise, long pulse	r260	-95.0 to -80.0	dbm	default
antenna noise temperature	r261	30 to 200	k	default
receiver noise, short pulse	r262	-90.0 to -75.0	dbm	default

Table 6-5. Receiver Category Valid Values and Edit Levels

Field	ID Number	Valid Values	Units	Edit Level
receiver noise tolerance	r263	0.0 to 6.0	db	ROC editable
minimum dynamic range	r264	85.0 to 95.0	db	ROC editable
path loss - at8 (10db) attenuator	r265	-9.00 to -11.00	db	default

Section 6.7 Signal Processor

When the operator selects the Signal Processor tab of the Adaptation Data window, the operator will be able to view the Adaptation Data for the Signal Processor.

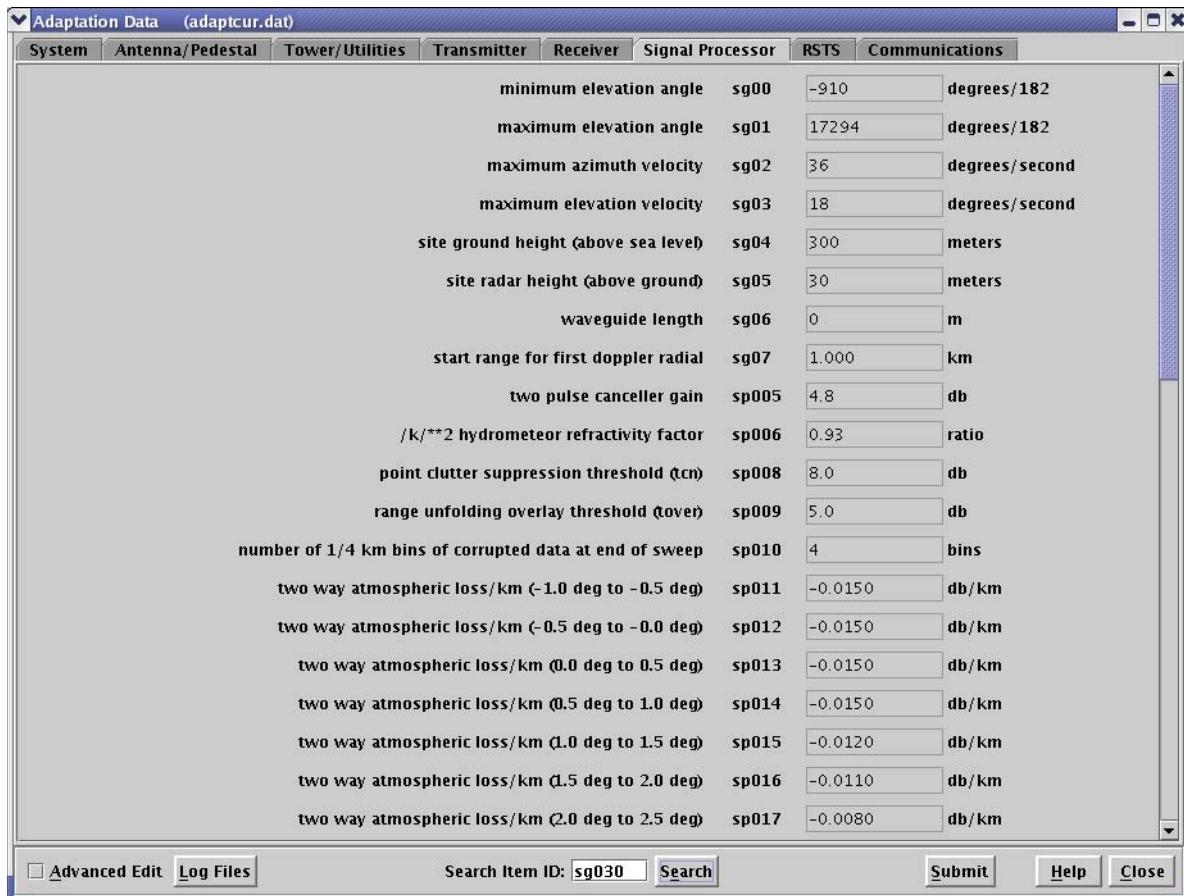


Figure 6-14. Signal Processor Tab of the Adaptation Data Window

The table below lists the items on the Signal Processor tab from top to bottom.

Table 6-6. Signal Processor Tab Valid Values and Edit Levels

Field	ID Number	Valid Values	Units	Edit Level
minimum elevation angle	sg00	-7281 to 7281	degrees	ROC editable

Table 6-6. Signal Processor Tab Valid Values and Edit Levels

Field	ID Number	Valid Values	Units	Edit Level
maximum elevation angle	sg01	0 to 40049	degrees/182	ROC editable
maximum azimuth velocity	sg02	0 to 100	degrees/ second	ROC editable
maximum elevation velocity	sg03	0 to 48	degrees/ second	ROC editable
site ground height (above sea level)	sg04	-100 to 12000	meters	advanced
site radar height (above ground)	sg05	0 to 1000	meters	advanced
waveguide length	sg06	0 to 1000	m	advanced
start range for first doppler radial	sg07	-32.768 to 32.768	km	advanced
two pulse canceller gain	sp005	1.0 to 10.0	db	advanced
hydrometer refractivity factor	sp006	0.10 to 1.10	ratio	advanced
point clutter suppression threshold (tcn)	sp008	0.0 to 30.0	db	advanced
range unfolding overlay threshold (tover)	sp009	0.0 to 20.0	db	advanced
number of 1/4 km bins of corrupted data at end of sweep	sp010	1 to 10	bins	advanced
two way atmospheric loss/km (-1.0 deg to -0.5 deg)	sp011	-0.0200 to -0.0020	db/km	ROC editable
two way atmospheric loss/km (-0.5 deg to 0.0 deg)	sp012	-0.0200 to -0.0020	db/km	ROC editable
two way atmospheric loss/km (0.0 deg to 0.5 deg)	sp013	-0.0200 to -0.0020	db/km	ROC editable

Table 6-6. Signal Processor Tab Valid Values and Edit Levels

Field	ID Number	Valid Values	Units	Edit Level
two way atmospheric loss/km (0.5 deg to 1.0 deg)	sp014	-0.0200 to -0.0020	db/km	ROC editable
two way atmospheric loss/km (1.0 deg to 1.5 deg)	sp015	-0.0200 to -0.0020	db/km	ROC editable
two way atmospheric loss/km (1.5 deg to 2.0 deg)	sp016	-0.0200 to -0.0020	db/km	ROC editable
two way atmospheric loss/km (2.0 deg to 2.5 deg)	sp017	-0.0200 to -0.0020	db/km	ROC editable
two way atmospheric loss/km (2.5 deg to 3.0 deg)	sp018	-0.0200 to -0.0020	db/km	ROC editable
two way atmospheric loss/km (3.0 deg to 3.5 deg)	sp019	-0.0200 to -0.0020	db/km	ROC editable
two way atmospheric loss/km (3.2 deg to 4.0 deg)	sp020	-0.0200 to -0.0020	db/km	ROC editable
two way atmospheric loss/km (4.0 deg to 4.5 deg)	sp021	-0.0200 to -0.0020	db/km	ROC editable
two way atmospheric loss/km (4.5 deg to 5.0 deg)	sp022	-0.0200 to -0.0020	db/km	ROC editable
two way atmospheric loss/km (> 0.5 deg)	sp023	-0.0200 to -0.0020	db/km	ROC editable
receiver noise normalization (-1.0 deg to -0.5 deg)	sp024	1.000 to 1.800	ratio	ROC editable
receiver noise normalization (-0.5 deg to 0.0 deg)	sp025	1.000 to 1.800	ratio	ROC editable

Table 6-6. Signal Processor Tab Valid Values and Edit Levels

Field	ID Number	Valid Values	Units	Edit Level
receiver noise normalization (0.0 deg to 0.5 deg)	sp026	1.000 to 1.800	ratio	ROC editable
receiver noise normalization (0.5 deg to 1.0 deg)	sp027	1.000 to 1.800	ratio	ROC editable
receiver noise normalization (1.0 deg to 1.5 deg)	sp028	1.000 to 1.800	ratio	ROC editable
receiver noise normalization (1.5 deg to 2.0 deg)	sp029	1.000 to 1.800	ratio	ROC editable
receiver noise normalization (2.0 deg to 2.5 deg)	sp030	1.000 to 1.800	ratio	ROC editable
receiver noise normalization (2.5 deg to 3.0 deg)	sp031	1.000 to 1.800	ratio	ROC editable
receiver noise normalization (3.0 deg to 3.5 deg)	sp032	1.000 to 1.800	ratio	ROC editable
receiver noise normalization (3.5 deg to 4.0 deg)	sp033	1.000 to 1.800	ratio	ROC editable
receiver noise normalization (4.0 deg to 4.5 deg)	sp034	1.000 to 1.800	ratio	ROC editable
receiver noise normalization (4.5 deg to 5.0 deg)	sp035	1.000 to 1.800	ratio	ROC editable
receiver noise normalization (> 5.0 deg)	sp036	1.000 to 1.800	ratio	ROC editable
clutter suppression degrade limit	sp167	35.0 to 50.0	db	ROC editable

Table 6-6. Signal Processor Tab Valid Values and Edit Levels

Field	ID Number	Valid Values	Units	Edit Level
clutter suppression maintenance limit	sp168	20.0 to 50.0	db	ROC editable
velocity check delta degrade limit	sp171	0.5 to 2.0	m/sec	ROC editable
velocity check delta maintenance limit	sp172	0.5 to 2.0	m/sec	ROC editable
spectrum width check delta degrade limit	sp173	0.5 to 2.0	m/sec	ROC editable
spectrum width check delta maintenance limit	sp174	0.5 to 2.0	m/sec	ROC editable
velocity unfolding overlay threshold	sp177	0.0 to 20.0	db	advanced
width unfolding overlay threshold	sp178	0.0 to 20.0	db	advanced

Section 6.8 RSTS

When the operator selects the RSTS tab of the Adaptation Data window, the operator will be able to view the Adaptation Data for the System Test Software.

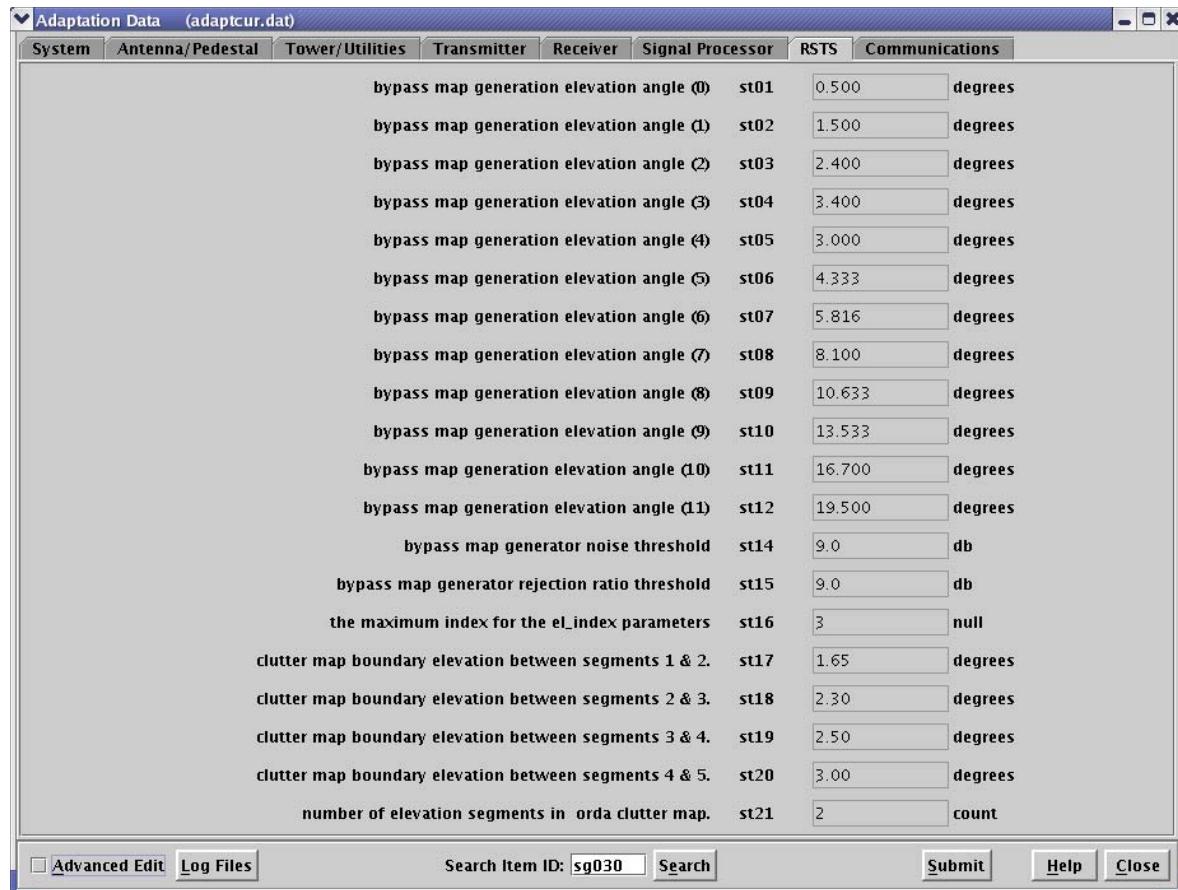


Figure 6-15. RSTS Tab of the Adaptation Data Window

The table below lists the items on the RSTS tab from top to bottom.

Table 6-7. RSTS Tab Valid Values and Edit Levels

Field	ID Number	Valid Values	Units	Edit Level
bypass map generation elevation angle (0)	st01	-1.000 to 45.000	degrees	ROC editable

Table 6-7. RSTS Tab Valid Values and Edit Levels

Field	ID Number	Valid Values	Units	Edit Level
bypass map generation elevation angle (1)	st02	-1.000 to 45.000	degrees	ROC editable
bypass map generation elevation angle (2)	st03	-1.000 to 45.000	degrees	ROC editable
bypass map generation elevation angle (3)	st04	-1.000 to 45.000	degrees	ROC editable
bypass map generation elevation angle (4)	st05	-1.000 to 45.000	degrees	ROC editable
bypass map generation elevation angle (5)	st06	-1.000 to 45.000	degrees	ROC editable
bypass map generation elevation angle (6)	st07	-1.000 to 45.000	degrees	ROC editable
bypass map generation elevation angle (7)	st08	-1.000 to 45.000	degrees	ROC editable
bypass map generation elevation angle (8)	st09	-1.000 to 45.000	degrees	ROC editable
bypass map generation elevation angle (9)	st10	-1.000 to 45.000	degrees	ROC editable
bypass map generation elevation angle (10)	st11	-1.000 to 45.000	degrees	ROC editable
bypass map generation elevation angle (11)	st12	-1.000 to 45.000	degrees	ROC editable
bypass map generator noise threshold	st14	-6.0 to 10.0	db	ROC editable
bypass map generator rejection ratio threshold	st15	0.0 to 10.0	db	ROC editable
the maximum index for the el_index parameters	st16	0 to 11	null	ROC editable
clutter map boundary elevation between segments 1 & 2	st17	0.50 to 3.00	degrees	ROC editable

Table 6-7. RSTS Tab Valid Values and Edit Levels

Field	ID Number	Valid Values	Units	Edit Level
clutter map boundary elevation between segments 2 & 3	st18	0.80 to 4.50	degrees	ROC editable
clutter map boundary elevation between segments 3 & 4	st19	1.00 to 6.00	degrees	ROC editable
clutter map boundary elevation between segments 4 & 5	st20	1.00 to 8.00	degrees	ROC editable
number of elevation segments in orda clutter map	st21	1 to 5	count	ROC editable

Section 6.9 Communications

When the operator selects the Communications tab of the Adaptation Data window, the operator will be able to view the Adaptation Data for the external communication.

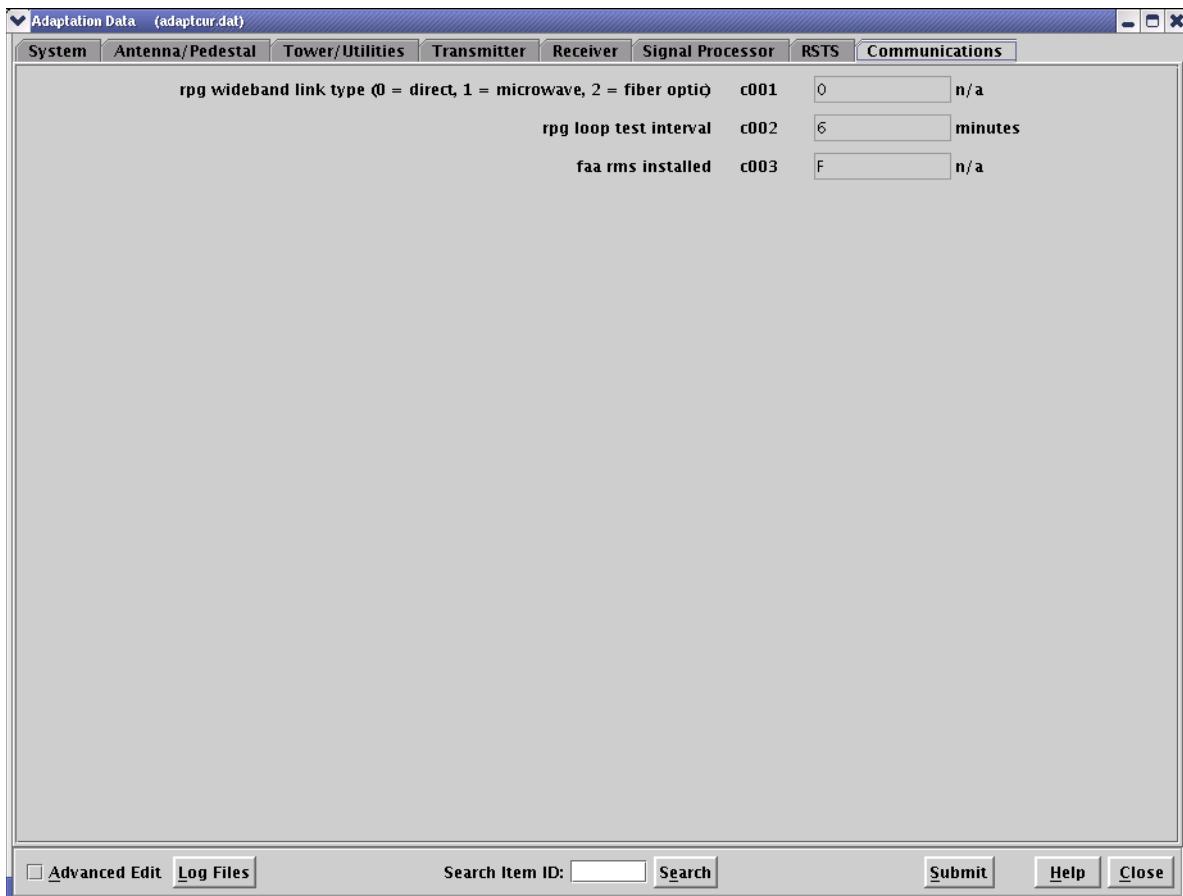


Figure 6-16. Communications Tab of the Adaptation Data Window

The table below lists the items on the Communications tab from top to bottom.

Table 6-8. Communications Tab Valid Values and Edit Levels

Field	ID Number	Valid Values	Units	Edit Level
rpg wideband link type (0=direct, 1=microwave, 2=fiberoptic)	c001	0 to 2	n/a	advanced

Table 6-8. Communications Tab Valid Values and Edit Levels

Field	ID Number	Valid Values	Units	Edit Level
rpg loop test interval	c002	1 to 20	minutes	advanced
faa rms installed	c003	T or F	n/a	advanced